

ABSTRACT

The invention is a response device to be used in functional magnetic resonance imaging (MRI) procedures. The device consists of keypads
5 with fiber optic push-button switches connected with fiber optic cables to an electronic unit for the illumination of the switches and the detection of depression events. The bodies of the keypads have a plurality of openings; therefore, the switches can be positioned at different locations on the keypad to be ergonomically activated with the patient's fingers.
10 The switches can also be located in a symmetrical arrangement allowing them to be pressed with a knob in sequence for performing joystick functions.